STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene
201 W. Preston Street • Baltimore, Maryland 21201
Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – Joshua M. Sharfstein, M.D., Secretary

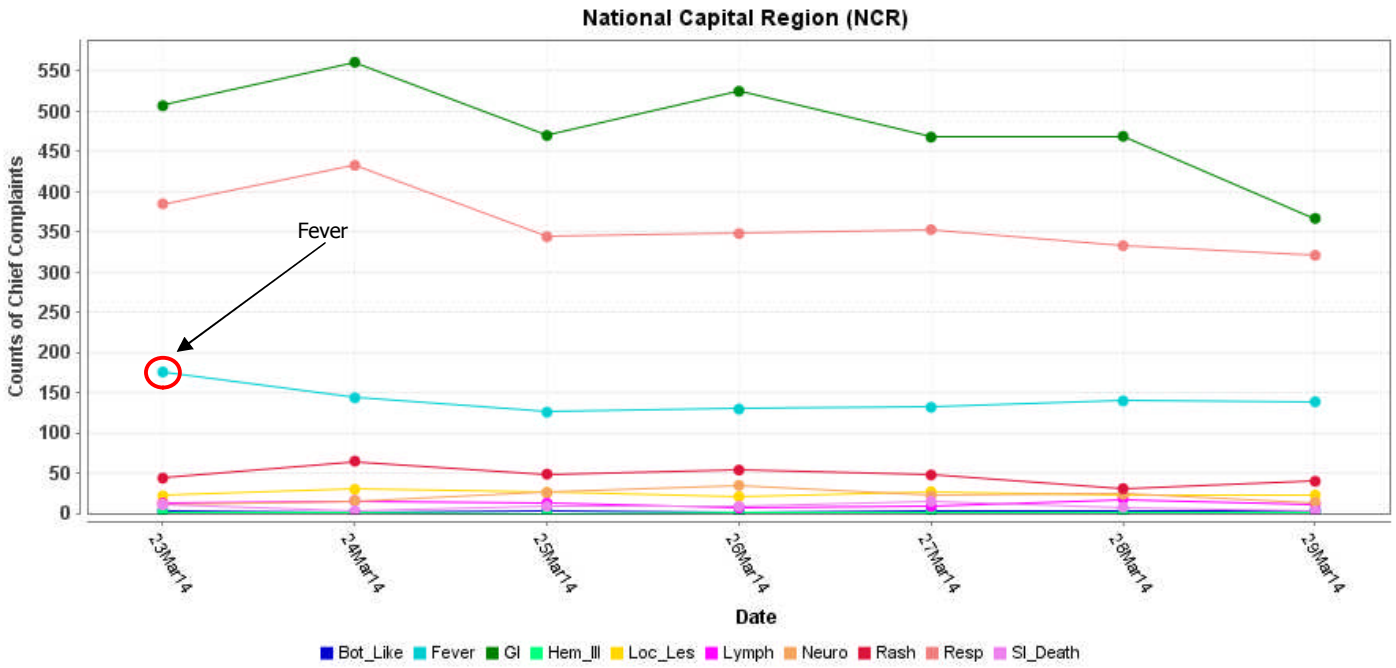
April 4, 2014

Public Health & Emergency Preparedness Bulletin: # 2014:13
Reporting for the week ending 03/29/14 (MMWR Week #13)

CURRENT HOMELAND SECURITY THREAT LEVELS

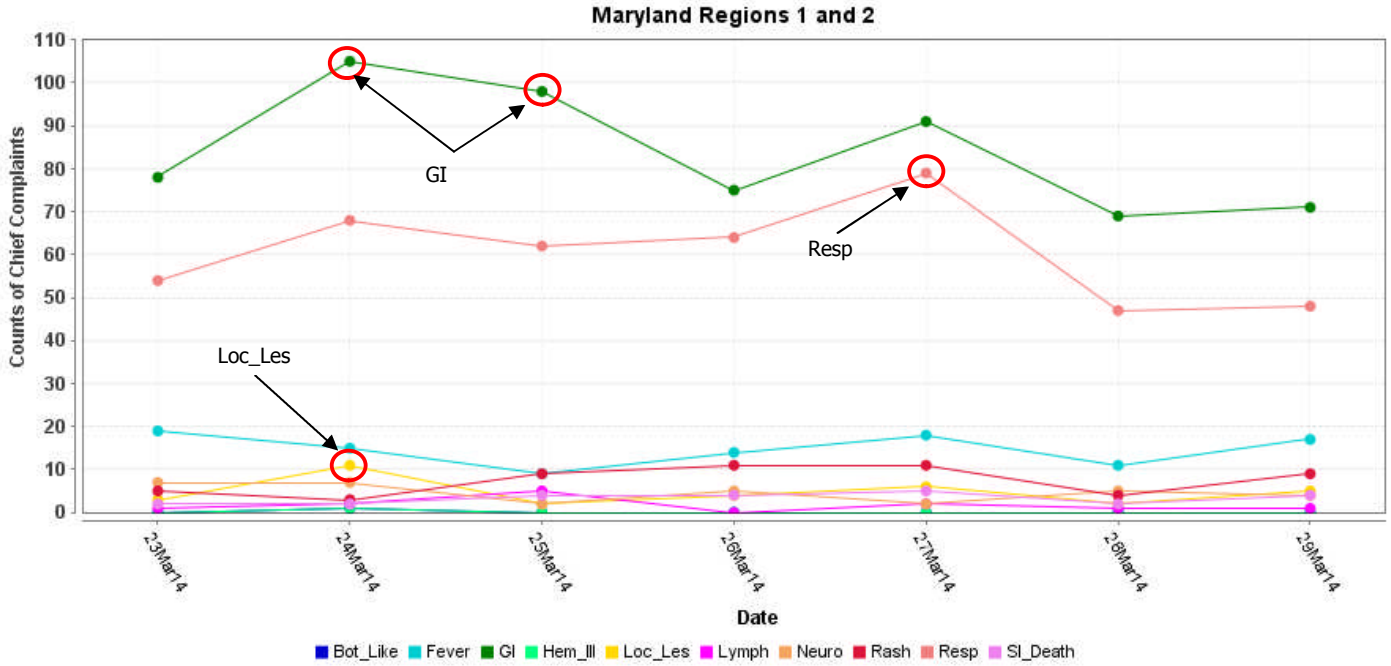
National: **No Active Alerts**
Maryland: **Level Four (MEMA status)**

SYNDROMIC SURVEILLANCE REPORTS
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

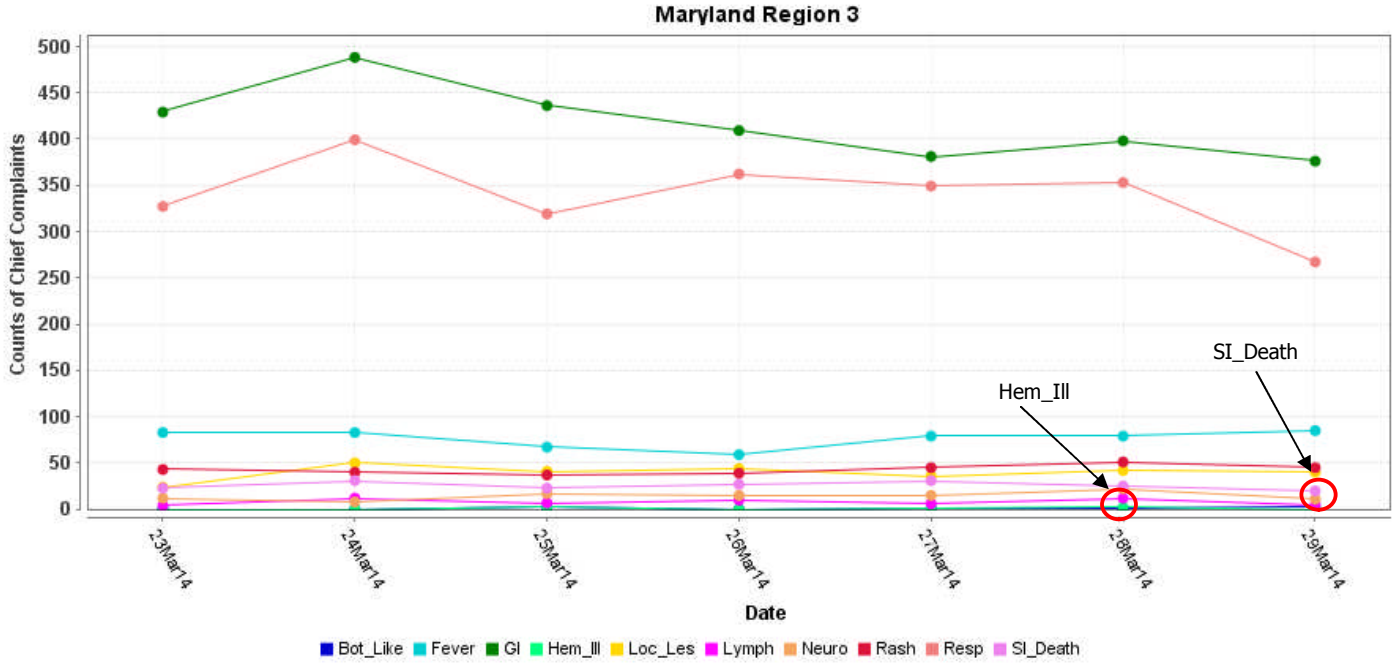


*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

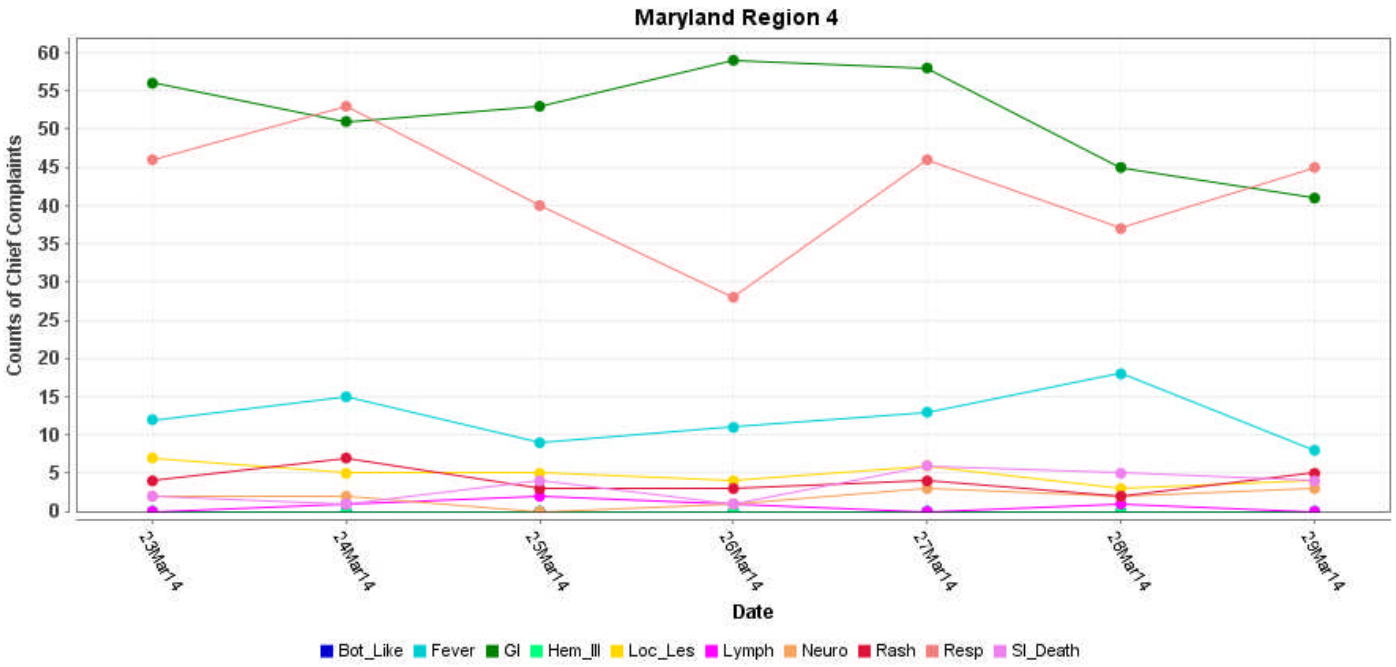
MARYLAND ESSENCE:



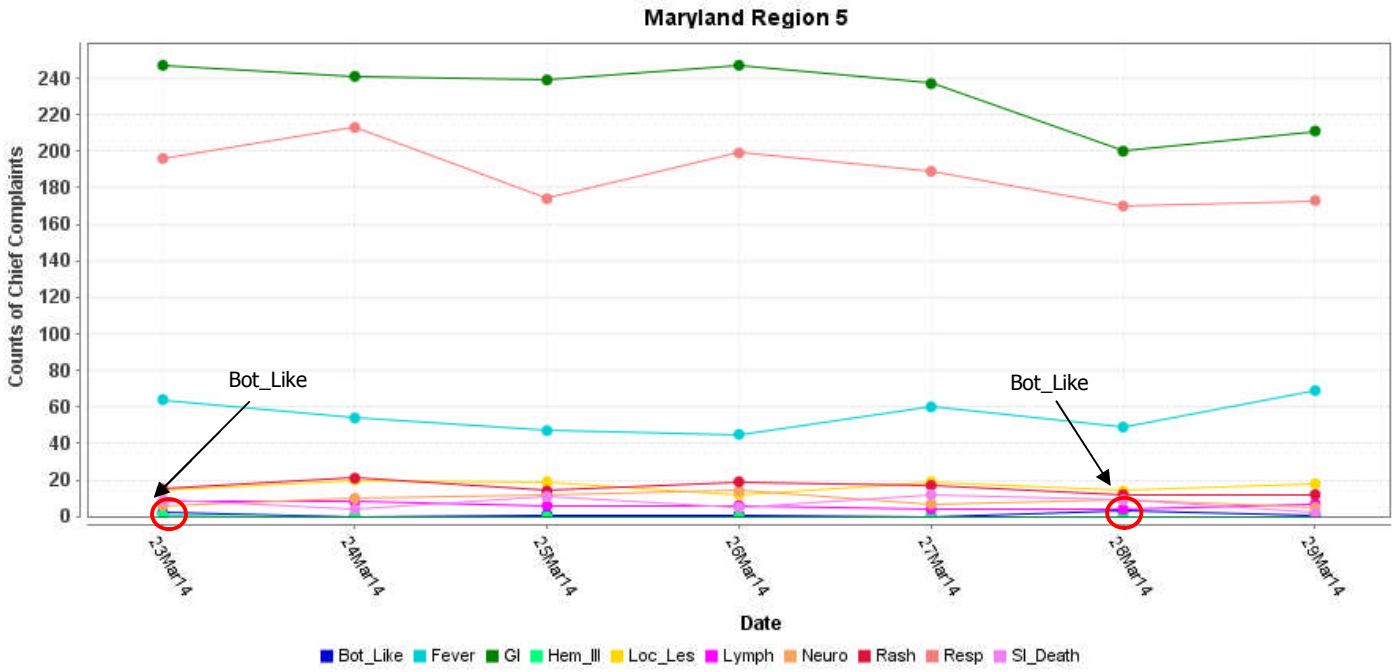
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



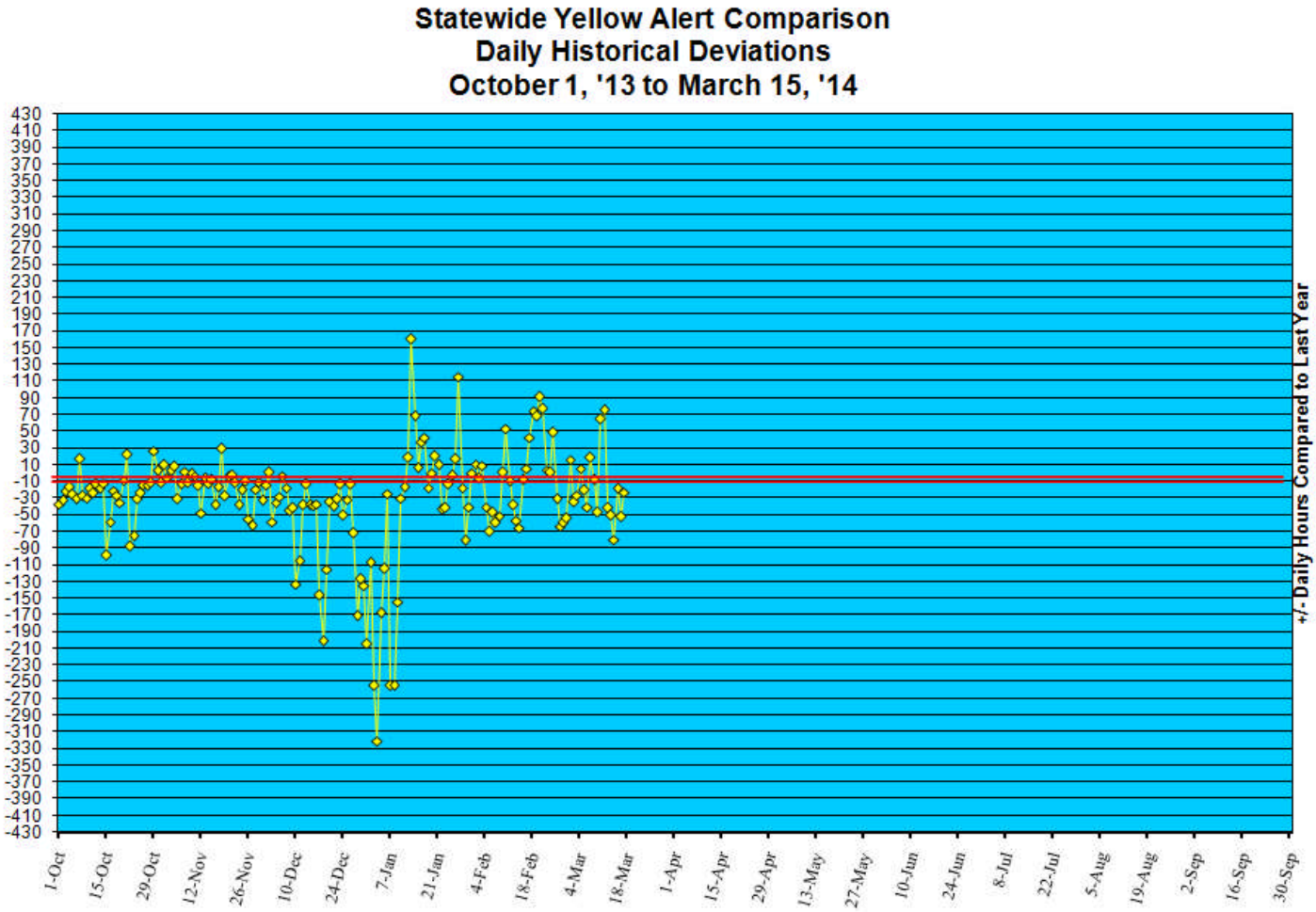
* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE



* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/13.



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in February 2014 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	**Aseptic**	**Meningococcal**
New cases (March 23 - March 29, 2014):	11	0
Prior week (March 16 - March 22, 2014):	2	0
Week#13, 2013 (March 24 - March 30, 2014):	11	0

13 outbreaks were reported to DHMH during MMWR Week 13 (March 23-29, 2014)

12 Gastroenteritis Outbreaks
10 outbreaks of GASTROENTERITIS in Nursing Homes
2 outbreaks of GASTROENTERITIS in Assisted Living Facilities

1 Other Outbreak
1 outbreak of CONJUNCTIVITIS associated with a Daycare Center

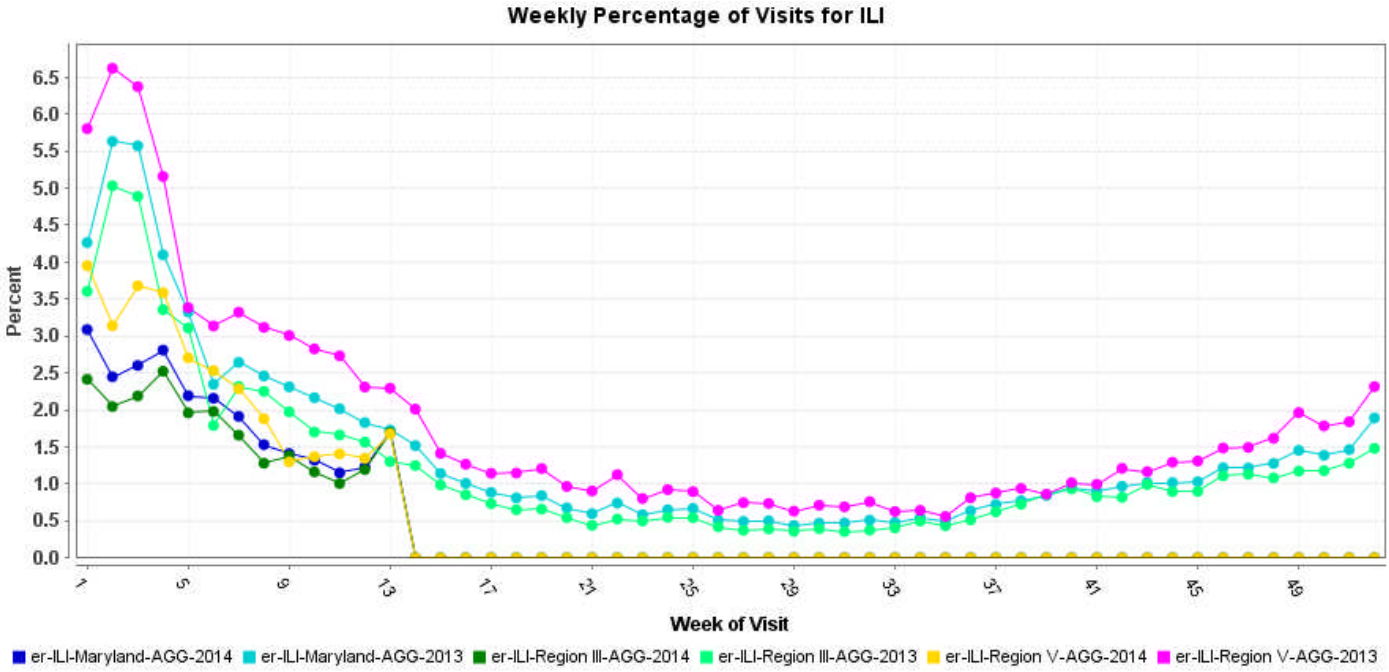
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May. Seasonal influenza activity for Week 12 was: Local with Minimal Intensity.

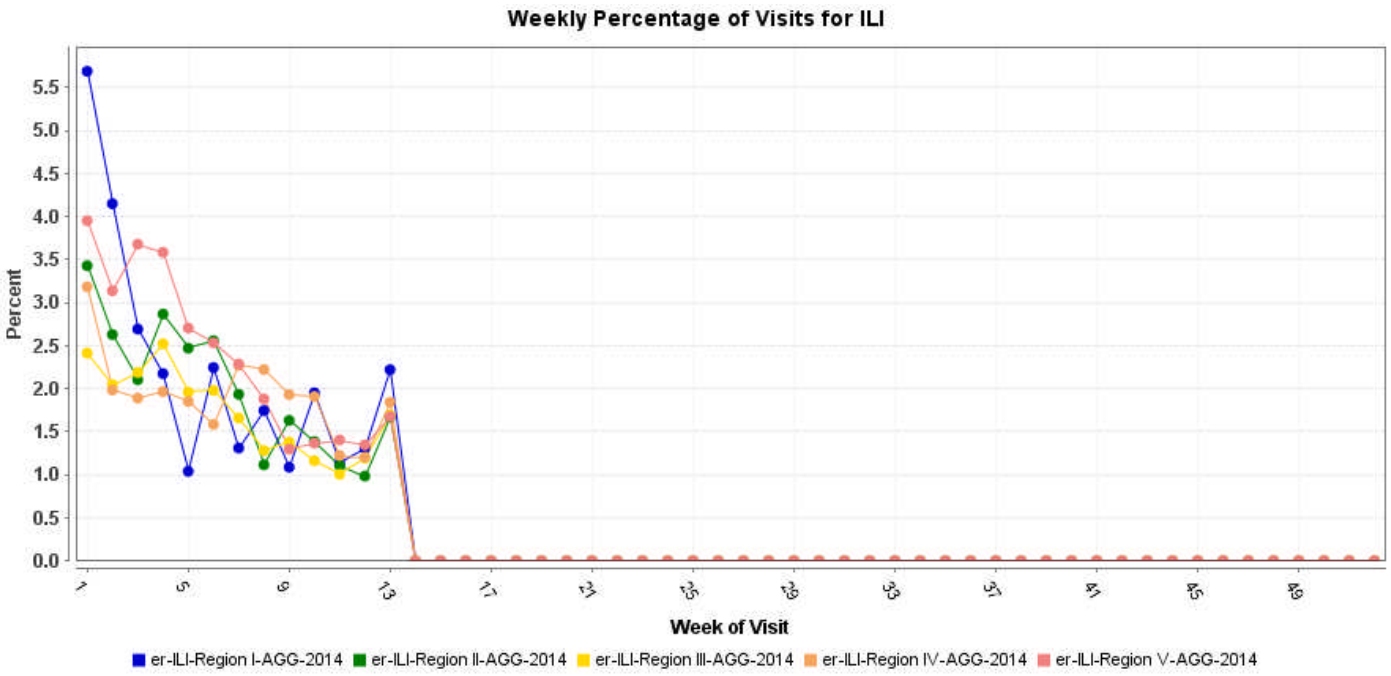
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



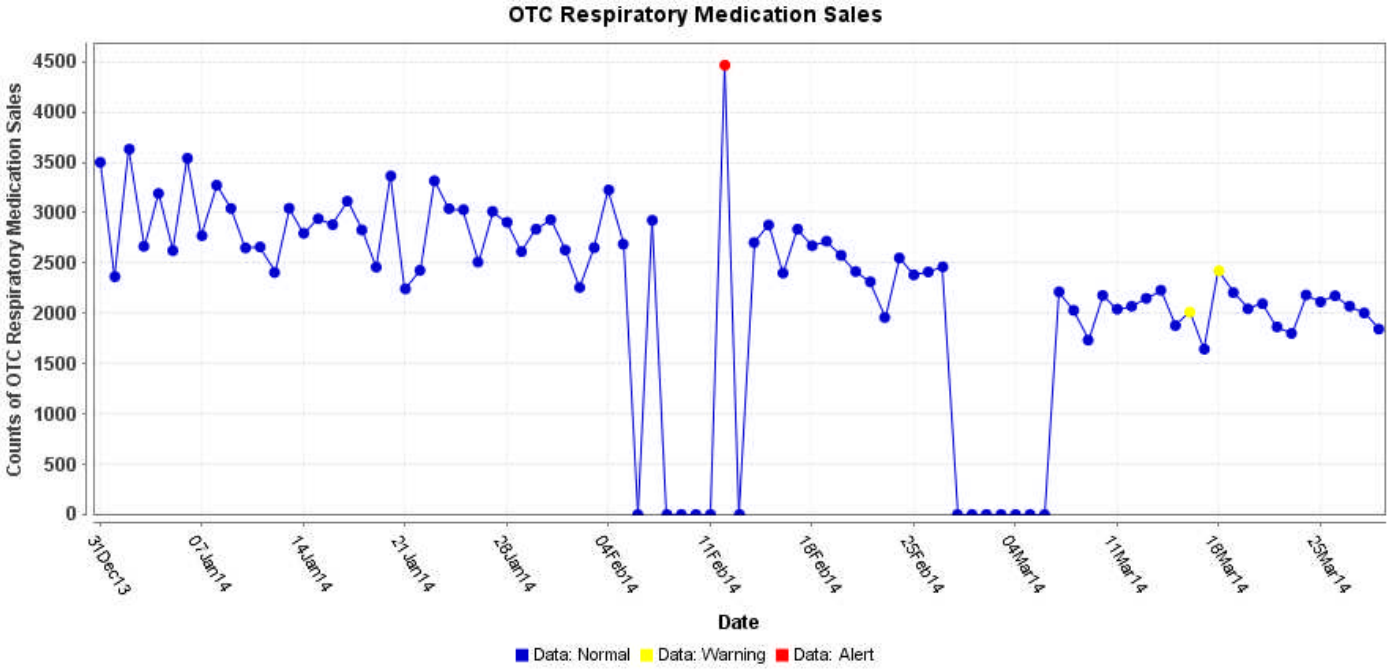
* Includes 2013 and 2014 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2014 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. As yet, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national and global levels, are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of January 24, 2014, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 650, of which 386 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

AVIAN INFLUENZA (H5N1): According to a report in the Egypt Independent today, 2 people, an adult woman and a child, have tested positive for H5N1 avian influenza. According to the report by Al-Masry Al-Youm [newspaper], "A 56-year-old woman in Beheira's Damanhour, and a 4-year-old child in Damietta, who are in critical condition, have been transferred to ICU and administered Tamiflu treatment. "These 2 patients are the 1st bird flu cases to be discovered since April 2013." There is no notice of the infections on the Egyptian Health Ministry website as of this publication. As Avian Flu Diary blogger, Mike Coston noted in a post Friday [21 Mar 2014] concerning the precipitous drop in cases in Egypt in recent years: "After reporting the most human infections with the H5N1 virus for 4 years running (2009=39, 2010=29, 2011=39, 2012=11), the reported number of cases out of Egypt plummeted last year (2013) to only 4." According to the WHO, the primary risk factor for human infection with the virus appears to be direct or indirect exposure to infected live or dead poultry or contaminated environments. They go on to say there is no evidence to suggest that the H5N1 virus can be transmitted to humans through properly prepared poultry or eggs. A few human cases have been linked to consumption of dishes made of raw, contaminated poultry blood. However, slaughter, defeathering, handling carcasses of infected poultry, and preparing poultry for consumption, especially in household settings, are likely to be risk factors.

NATIONAL DISEASE REPORTS*

SALMONELLOSIS (ILLINOIS): 27 March 2014, The Illinois Department of Public Health [IDPH] issued a warning Thursday, 27 Mar 2014, saying 100 people have contracted salmonellosis linked to illegally manufactured Mexican-style cheeses. Health departments in Cook, DuPage, Boone, Fayette, Kane, Lake, LaSalle, Macon, Marion, McHenry, Vermillion, Washington and Will counties have reported about 100 cases of salmonellosis believed to be associated with the cheese since July 2012, according to a statement from the department. IDPH is working to identify the manufacturer of the contaminated cheese, according to the department. Many cases have reported consuming Mexican-style cheese obtained from worksites, including factories, and at train stations, from street vendors and from relatives and friends, the department said. The cheese is not labeled and is often wrapped in aluminum foil. "It is important for you to check the labeling to make sure the product was made by a licensed dairy manufacturer -- even if you purchased the cheese from a grocery store," IDPH Director Dr. LaMar Hasbrouck said. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents)

INTERNATIONAL DISEASE REPORTS*

CAMPYLOBACTERIOSIS (NEW ZEALAND): 29 March 2014, A Timaru [Canterbury region] raw milk supplier is being blamed for an outbreak of the bacterium, _Campylobacter_. A total of 7 cases have been confirmed in those who purchased milk from Timaru Village Milk, but South Canterbury Medical Officer of Health Dr Daniel Williams said that number could be just the "tip of the iceberg." Village Milk shut its doors on Wednesday, 26 Mar 2014, awaiting more test results, and its franchisees have apologized. Stu and Andrea Weir said correct procedure was not followed. New cows were introduced to the herd prematurely when test results showed contaminants were present. The affected batch of milk was sold over 7 and 8 Mar 2014. "We let people down by not carrying out procedures properly; it's a bit disappointing," Mr Weir said. Though the Weirs claim raw milk is a completely safe product when procedures are followed, the medical profession and Ministry of Primary Industries (MPI) disagree. "Drinking raw milk is risky for your health," Dr Williams said. "It can contain disease-causing bacteria and other organisms which can lead to gastroenteritis and other illnesses, some of which can be life-threatening," he added. Public Health Ministry for Primary Industries principal adviser Dr Craig Thornley said there was always a risk with raw milk, "even when stringent control measures are followed." New Zealand legislation allows producers to sell up to 5 liters of raw milk daily at the farm gate to buyers who purchase it for themselves or their families. Ministry of Health data shows there were 5 disease outbreaks due to raw milk consumption between 2007 and 2009, as against 16 in 2010 to 2012. The amount of raw milk sold in New Zealand is unknown, but according to MPI, research suggests between 1 and 3 per cent of the population consume it. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents)

EBOLA VIRUS DISEASE (GUINEA): 27 March 2014, The Ministry of Health [MOH] of Guinea has today [27 Mar 2014] reported 4 laboratory confirmed cases of Ebola haemorrhagic fever (EHF) in the capital, Conakry. In addition, a 5th suspected case died without laboratory confirmation. Intensive case investigations are underway to identify the source and route of these patients' infection, record their travel histories before arrival in Conakry and determine their period of infectivity for the purposes of contact tracing. Rapid Response Teams are carrying out these investigations and sensitizing health care workers and the affected communities about EHF to reduce the risk of further transmission. The total number of suspected and confirmed cases in the on-going EHF outbreak in Guinea has increased to 103, including 66 deaths. Today 15 new suspected cases were reported in Guinea (8 in Guekedou and 2 in Macenta, in addition to the 5 cases in Conakry). The case fatality rate (CFR) is 64 percent. All age groups have been affected but most of the cases are adults aged 15-59 years; 4 health care workers are among the dead attributed to the Ebola outbreak. As this is a rapidly changing situation, the number of reported cases and deaths are preliminary and subject to change due to enhanced surveillance activities and laboratory testing of cases. Since the beginning of the outbreak, most of the cases have been reported in 3 districts in south east Guinea (Guekedou, Macenta, and Kissidougou districts).

Contact tracing and follow up continues in these areas. To date [27 Mar 2014], 15 cases have tested positive by PCR testing for the Ebola virus, confirmed by collaborating laboratories including the Institut Pasteur Lyon, France, Institut Pasteur (IP) Dakar, Senegal and Bernhard-Nocht Institute of Tropical Medicine Hamburg, Germany. Laboratory studies demonstrated that _Zaire ebolavirus_ is the virus responsible for the outbreak. The number of laboratory confirmed cases is subject to change as the laboratory results from the participating laboratories are still being consolidated and new samples are being tested. (Viral Hemorrhagic Fevers are listed in Category A on the CDC List of Critical Biological Agents)

SALMONELLOSIS (UNITED KINGDOM): 25 March 2014, An investigation has been launched into an outbreak of salmonellosis possibly linked to laverbread seaweed. Public Health Wales said there are 12 cases involving adults in the Swansea, Neath Port Talbot and Carmarthenshire areas, of which 10 ate laverbread in the days before they fell ill. A total of 3 people have needed hospital treatment but all have been discharged.

*****Anyone who bought laverbread on Tuesday [25 Mar 2014] or earlier that may have come from Penclawdd is asked to throw it away.

"Given that we cannot rule out laverbread at present, it is very important that... anyone with this product at home does not eat it," said Dr Jorg Hoffmann, Public Health Wales. Local firm Penclawdd Shellfish Processing Ltd has withdrawn sales of its laverbread as a precaution. Product sampling carried out so far has not proved a firm link between the products and the outbreak and investigations are ongoing. The product is available at a number of high street retailers and Penclawdd is the only supplier of laverbread to Tesco. Dr Jorg Hoffmann, consultant in communicable disease control for Public Health Wales, said: "We know that the majority of cases have eaten laverbread produced by Penclawdd. The company has cooperated fully with our investigations and has chosen to voluntarily withdraw the product from sale as a precaution. "Laverbread is generally a safe product to eat, and it remains unclear whether it is indeed the source of this outbreak. However, given that we cannot rule out laverbread at present, it is very important that, to avoid the risk of illness, anyone with this product at home does not eat it." Laverbread is the boiled and minced laver seaweed, often fried with bacon and cockles as a traditional Welsh breakfast dish. The seaweed is eaten worldwide, especially in Asia, and is often used in Japanese sushi dishes. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents)

BOTULISM (ITALY): 24 March 2014, Remaining with a guarded prognosis, but improving, a 33-year-old was admitted to a hospital in Camposampiero (Padua province) for botulism after eating a bowl of packaged minestrone soup. The young person remains intubated in Intensive Care but seems to be slowly regaining mobility, after the paresis [paralysis] caused by the infection. Meanwhile, the director of health had immediately alerted the Ministry of Health (to which has been sent a sample of the minestrone soup eaten by the 33-year-old). The ministry has enabled the seizure of the minestrone soup from all points of sale. The young man had eaten a bowl of precooked Buona Terra minestrone soup* during a lunch break. Botulinum toxin type B has been found in residues of the minestrone soup at the laboratories of the Istituto Zooprofilattico Sperimentale delle Venezie, Legnaro (Padua province). The victim had consumed the envelope of precooked food on 19 Mar 2014, and was hospitalized in the intensive care ward of the hospital of Camposampiero on 21 Mar 2014. He was treated with anti-botulism serum on 22 Mar 2014. (Botulism is listed in Category A on the CDC List of Critical Biological Agents)

National and International Disease Reports are retrieved from http://www.promedmail.org/.

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/ or follow us on Facebook at www.facebook.com/MarylandOPR.

Maryland's Resident Influenza Tracking System: http://dhmh.maryland.gov/flusurvey

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents

Table: Text-based Syndrome Case Definitions and Associated Category A Conditions

Syndrome	Definition	Category A Condition
Botulism-like	ACUTE condition that may represent exposure to botulinum toxin ACUTE paralytic conditions consistent with botulism: cranial nerve VI (lateral rectus) palsy, ptosis, dilated pupils, decreased gag reflex, media rectus palsy. ACUTE descending motor paralysis (including muscles of respiration) ACUTE symptoms consistent with botulism: diplopia, dry mouth, dysphagia, difficulty focusing to a near point.	Botulism
Hemorrhagic Illness	SPECIFIC diagnosis of any virus that causes viral hemorrhagic fever (VHF): yellow fever, dengue, Rift Valley fever, Crimean-Congo HF, Kyasanur Forest disease, Omsk HF, Hantaan, Junin, Machupo, Lassa, Marburg, Ebola ACUTE condition with multiple organ involvement that may be consistent with exposure to any virus that causes VHF ACUTE blood abnormalities consistent with VHF: leukopenia, neutropenia, thrombocytopenia, decreased clotting factors, albuminuria	VHF
Lymphadenitis	ACUTE regional lymph node swelling and/ or infection (painful bubo- particularly in groin, axilla or neck)	Plague (Bubonic)
Localized Cutaneous Lesion	SPECIFIC diagnosis of localized cutaneous lesion/ ulcer consistent with cutaneous anthrax or tularemia ACUTE localized edema and/ or cutaneous lesion/ vesicle, ulcer, eschar that may be consistent with cutaneous anthrax or tularemia INCLUDES insect bites EXCLUDES any lesion disseminated over the body or generalized rash EXCLUDES diabetic ulcer and ulcer associated with peripheral vascular disease	Anthrax (cutaneous) Tularemia
Gastrointestinal	ACUTE infection of the upper and/ or lower gastrointestinal (GI) tract SPECIFIC diagnosis of acute GI distress such as Salmonella gastroenteritis ACUTE non-specific symptoms of GI distress such as nausea, vomiting, or diarrhea EXCLUDES any chronic conditions such as inflammatory bowel syndrome	Anthrax (gastrointestinal)

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

Syndrome	Definition	Category A Condition
Respiratory	ACUTE infection of the upper and/ or lower respiratory tract (from the oropharynx to the lungs, includes otitis media) SPECIFIC diagnosis of acute respiratory tract infection (RTI) such as pneumonia due to parainfluenza virus ACUTE non-specific diagnosis of RTI such as sinusitis, pharyngitis, laryngitis ACUTE non-specific symptoms of RTI such as cough, stridor, shortness of breath, throat pain EXCLUDES chronic conditions such as chronic bronchitis, asthma without acute exacerbation, chronic sinusitis, allergic conditions (Note: INCLUDE *acute exacerbation* of chronic illnesses.)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Neurological	ACUTE neurological infection of the central nervous system (CNS) SPECIFIC diagnosis of acute CNS infection such as pneumococcal meningitis, viral encephalitis ACUTE non-specific diagnosis of CNS infection such as meningitis not otherwise specified (NOS), encephalitis NOS, encephalopathy NOS ACUTE non-specific symptoms of CNS infection such as meningismus, delerium EXCLUDES any chronic, hereditary or degenerative conditions of the CNS such as obstructive hydrocephalus, Parkinson's, Alzheimer's	Not applicable
Rash	ACUTE condition that may present as consistent with smallpox (macules, papules, vesicles predominantly of face/arms/legs) SPECIFIC diagnosis of acute rash such as chicken pox in person > XX years of age (base age cut-off on data interpretation) or smallpox ACUTE non-specific diagnosis of rash compatible with infectious disease, such as viral exanthem EXCLUDES allergic or inflammatory skin conditions such as contact or seborrheaic dermatitis, rosacea EXCLUDES rash NOS, rash due to poison ivy, sunburn, and eczema	Smallpox
Specific Infection	ACUTE infection of known cause not covered in other syndrome groups, usually has more generalized symptoms (i.e., not just respiratory or gastrointestinal) INCLUDES septicemia from known bacteria INCLUDES other febrile illnesses such as scarlet fever	Not applicable

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents (continued from previous page)

Syndrome	Definition	Category A Condition
Fever	ACUTE potentially febrile illness of origin not specified INCLUDES fever and septicemia not otherwise specified INCLUDES unspecified viral illness even though unknown if fever is present EXCLUDE entry in this syndrome category if more specific diagnostic code is present allowing same patient visit to be categorized as respiratory, neurological or gastrointestinal illness syndrome	Not applicable
Severe Illness or Death potentially due to infectious disease	ACUTE onset of shock or coma from potentially infectious causes EXCLUDES shock from trauma INCLUDES SUDDEN death, death in emergency room, intrauterine deaths, fetal death, spontaneous abortion, and still births EXCLUDES induced fetal abortions, deaths of unknown cause, and unattended deaths	Not applicable